

Monoclonal Anti-Human 4-1BB Antibody, Mouse IgG1 (Clone: AM749), premium grade

Catalog # 41B-M749G0



BIOSYSTEMS
Acro

Source

Monoclonal Anti-Human 4-1BB Antibody, Mouse IgG1 (Clone: AM749), premium grade (41B-M749G0) is a chimeric monoclonal antibody recombinantly produced from human 293 cells (HEK293), which combines the variable region of a human monoclonal antibody with mouse IgG1 constant domain.

It is produced under our rigorous quality control system that incorporates a comprehensive set of tests including sterility and endotoxin tests. Product performance is carefully validated and tested for compatibility for cell culture use or any other applications in the early preclinical stage. When ready to transition into later clinical phases, we also offer a custom GMP protein service that tailors to your needs. We will work with you to customize and develop a GMP-grade product in accordance with your requests that also meets the requirements for raw and ancillary materials use in cell manufacturing of cell-based therapies.

Isotype

Mouse IgG1/kappa

Conjugate

Unconjugated

Specificity

This product is a specific antibody specifically reacts with 4-1BB.

Endotoxin

Less than 0.005 EU per μg by the LAL method.

Purity

>95% as determined by SDS-PAGE.

>95% as determined by SEC-MALS.

Sterility

Negative

Formulation

Supplied as 0.2 μm filtered solution in PBS, pH7.4 with trehalose as protectant.

Contact us for customized product form or formulation.

Shipping

This product is supplied and shipped with dry ice, please inquire the shipping cost.

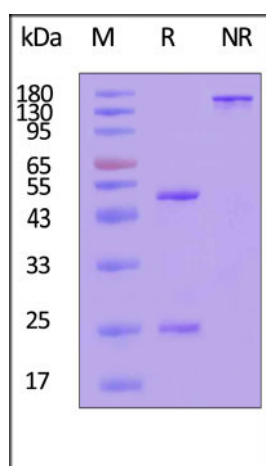
Storage

For long term storage, the product should be stored at liquid state at -70°C .

This product is stable after storage at:

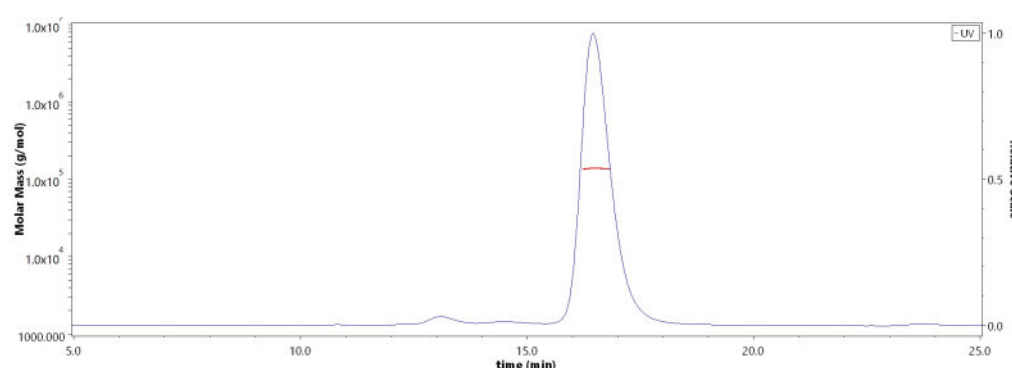
- $2-8^{\circ}\text{C}$ for 12 months under sterile condition;
- -70°C for 24 months.

SDS-PAGE



Monoclonal Anti-Human 4-1BB Antibody, Mouse IgG1 (Clone: AM749), premium grade on SDS-PAGE under reducing (R) and non-reducing (NR) conditions. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95% (With [Star Ribbon Pre-stained Protein Marker](#)).

SEC-MALS



The purity of Monoclonal Anti-Human 4-1BB Antibody, Mouse IgG1 (Clone: AM749), premium grade (Cat. No. 41B-M749G0) is more than 95% and the molecular weight of this protein is around 130-160 kDa verified by SEC-MALS.

[Report](#)

Bioactivity-Bioactivity CELL BASE

Discounts, Gifts,
and more!

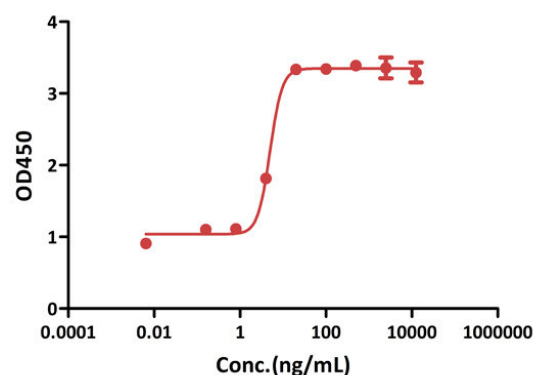


www.acrobiosystems.com

6/25/2024



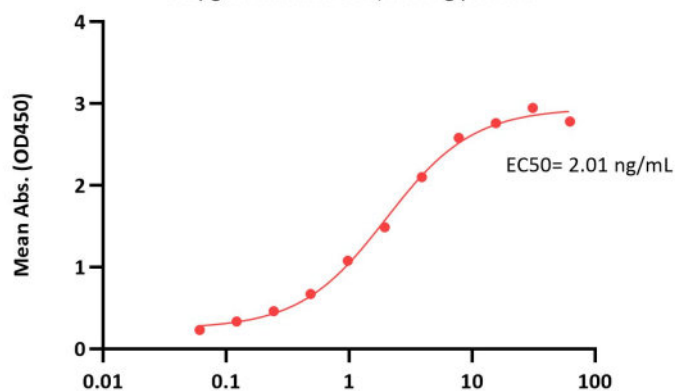
Monoclonal Anti-Human 4-1BB Antibody, Mouse IgG1 (Clone: AM749), premium grade stimulates the secretion of IL-8 by HT1080 human CD137 cell line



Monoclonal Anti-Human 4-1BB Antibody, Mouse IgG1 (Clone: AM749), premium grade (Cat. No. 41B-M749G0) stimulates the secretion of IL-8 by HT1080 human CD137 cell line. The EC50 value of this effect is 4.985 ng/mL (Routinely tested).

Bioactivity-Elisa

Monoclonal Anti-Human 4-1BB Antibody, Mouse IgG1 (Clone: AM749), premium grade ELISA
0.1 µg of Human 4-1BB, His Tag per well



Monoclonal Anti-Human 4-1BB Antibody, Mouse IgG1 (Clone: AM749), premium grade Conc. (ng/mL)

Immobilized Human 4-1BB, His Tag (Cat. No. 41B-H52Hc) at 1 µg/mL (100 µL/well) can bind Monoclonal Anti-Human 4-1BB Antibody, Mouse IgG1 (Clone: AM749), premium grade (Cat. No. 41B-M749G0) with a linear range of 0.1-4 ng/mL (QC tested).

Background

4-1BB, also known as CD137 and TNFRSF9, is an approximately 30 kDa transmembrane glycoprotein in the TNF receptor superfamily. 4-1BB functions in the development and activation of multiple immune cells. Mature human 4-1BB consists of a 163 amino acid (aa) extracellular domain (ECD) with four TNFR cysteine-rich repeats, a 27 aa transmembrane segment, and a 42 aa cytoplasmic domain. Within the ECD, human 4-1BB shares 60% aa sequence identity with mouse and rat 4-1BB. 4-1BB is expressed as a disulfide-linked homodimer on various populations of activated T cell including CD4, CD8, memory CD8, NKT, and regulatory T cells as well as on myeloid and mast cell progenitors, dendritic cells, mast cells, and bacterially infected osteoblasts. It binds with high affinity to the transmembrane 4-1BB Ligand/TNFSF9 which is expressed on antigen presenting cells and myeloid progenitor cells. This interaction costimulates the proliferation, activation, and/or survival of the 4-1BB expressing cell. It can also enhance the activation-induced cell death of repetitively stimulated T cells. Mice lacking 4-1BB show augmented T cell activation, perhaps due to its absence on regulatory T cells. 4-1BB can associate with OX40 on activated T cells, forming a complex that responds to either ligand and inhibits Treg and CD8 T cell proliferation. Reverse signaling through 4-1BB Ligand inhibits the development of dendritic cells, B cells, and osteoclasts but supports mature dendritic cell survival and costimulates the proliferation and activation of mast cells. 4-1BB activation enhances CD8 T cell and NK cell mediated anti-tumor immunity. It also contributes to the development of inflammation in high fat diet-induced

Discounts, Gifts, and more!



Monoclonal Anti-Human 4-1BB Antibody, Mouse IgG1 (Clone: AM749), premium grade

Catalog # 41B-M749G0



metabolic syndrome . Soluble forms of 4-1BB and 4-1BB Ligand circulate at elevated levels in the serum of rheumatoid arthritis and hematologic cancer patients, respectively .

Clinical and Translational Updates

Discounts, Gifts,
and more!



➤ www.acrobiosystems.com

6/25/2024